

WHAT IS CLAIMED:

1. A device for conveying filter elements to a filter element magazine, the device comprising:
a rotatable drum comprising at least one seat for receiving a filter element;
and
a detection device that controls a rotation of the drum and detects the filter elements .
2. The device of claim 1, wherein the filter elements comprise filter rods.
3. The device of claim 1, wherein the filter elements comprise rod-shaped filter elements.
4. The device of claim 1, further comprising a mechanism that feeds the filter elements in a lengthwise axial manner to the drum.
5. The device of claim 1, wherein the filter elements are fed to the filter element magazine in a crosswise axial manner.
6. The device of claim 1, wherein the detection device comprises a light barrier.
7. The device of claim 1, wherein the drum interacts with a mechanical element that causes a crosswise axial insertion of the filter elements into the filter element magazine.
8. The device of claim 1, further comprising a mechanism that causes a crosswise axial insertion of the filter elements into the filter element magazine.
9. The device of claim 1, further comprising at least one fixed element that conveys the filter elements to the drum.
10. The device of claim 1, wherein the at least one seat comprises a plurality of seats.
11. The device of claim 1, further comprising a braking element which engages the filter element.

12. The device of claim 11, wherein the braking element acts to provide braking to the filter element once the filter element is moved into the at least one seat.

13. The device of claim 11, wherein the braking element acts to provide braking to the filter element as the filter element is moved into the at least one seat.

14. The device of claim 1, further comprising a retaining mechanism which traps the filter element after the filter element is moved into the at least one seat.

15. The device of claim 14, wherein the retaining mechanism is movably mounted.

16. The device of claim 14, wherein the retaining mechanism can move away from the drum when the drum is rotated.

17. The device of claim 1, wherein the drum is adapted to rotate before the filter element has reached a final position in the at least one seat.

18. The device of claim 1, wherein the drum includes an element for aligning the filter elements.

19. The device of claim 1, further comprising a mechanism for aligning the filter elements on the drum.

20. The device of claim 1, further comprising an ejection mechanism adapted to eject defective filter elements.

21. A filter element receiver station comprising the device of claim 1.

22. An arrangement for conveying filter elements to a filter element magazine, comprising:

at least one device according to claim 1; and

the filter element magazine,

wherein the at least one device is arranged outside the filter element magazine.

23. The arrangement of claim 22, wherein the at least one device comprises a plurality of devices.

24. The arrangement of claim 23, wherein the plurality of devices comprises three devices.

25. The arrangement of claim 23, wherein the plurality of devices are arranged one below the other relative to a horizontal axis running through at least one of the plurality of devices.

26. A process for controlling movement of filter elements to a filter element magazine, the process comprising:

conveying at least one filter element in a lengthwise axial direction to a drum that includes seats, wherein at least one of the seats is adapted to receive the at least one filter element;

guiding the at least one filter element past a detection device;

generating a start signal as soon as an end of the at least one filter element has passed the detection device;

rotating the drum in a crosswise axial direction after receiving the start signal; and

moving the at least one filter element into the filter element magazine.

27. The process of claim 26, wherein the rotating comprises rotating the drum to an angle that is approximately equal 360° divided by a number of the seats.

28. The process of claim 26, further comprising determining whether the at least one filter element is defective or not.

29. The process of claim 28, further comprising discharging the at least one filter when it is determined to be defective.

30. The process of claim 28, wherein the determining comprises measuring a dwell time.

31. The process of claim 30, wherein the measuring comprises measuring a length of the dwell time at the detection device.

32. The process of claim 30, wherein the measuring comprises measuring a length of the dwell time using the detection device.

33. The process of claim 30, further comprising discharging the at least one filter element when the dwell time is greater than a predetermined amount.

34. The process of claim 33, wherein the predetermined amount is dependent on a speed of the conveying.

35. The process of claim 26, wherein the conveying comprises feeding the at least one filter element to the drum using a feeding mechanism that includes accelerating rollers, a channel and brake rollers.

36. The process of claim 30, wherein the least one filter element is moved into the filter element magazine within a time period that is less than or equal to the dwell time.